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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,181	09/24/2003	Ting-Pi Yeh	LEEL121774	7212

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EXAMINER

TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,181

Applicant(s)

YEH ET AL.

Examiner

Brian K. Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1-13 remain in the application.

Drawings

2. Figures 1a and 1b should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The specification spanning pgs. 1-2, state that these Figures are of the Prior Art.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 10, the term “waveguide wire” lacks antecedent basis. The claims previously recite a “waveguide” but not a “waveguide wire”. Clarification is requested.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freund et al. (5,989,932), Chakrabarti et al. (6,386,533) or Freund et al. (6,131,263) in combination with Hu et al. (6,618,409).

Freund et al. (5,989,932) teaches a method of apparatus for retaining and releasing laser bars during a facet coating operation. The facet coating operation utilizes spacers to separate the laser bars during coating. In Fig. 9, col. 4, line 65 – col. 5, line 15), Freund et al. (5,989,932) teaches and depicts a spacer having cutout portions defining shoulders.

Chakrabarti et al. (6,386,533) teaches a laser processing fixture whereby laser bars are alternated with spacers in a coating operation to coat the facets of the laser bars. Chakrabarti et al. (6,386,533) teaches and depicts in Fig. 5, spacers (64) designed in a notch end portion (66,68) and contemplates various other modifications of geometry of the spacers itself (col. 4, lines 42-65).

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Freund et al. (6,131,263) teaches a method and apparatus for releasing laser bars after facet coating. Stacked spacers (110) are arranged to interconnect between adjacent spacers having a laser bar located between the spacers to be subjected to facet coating (col. 2, lines 10-50 and Figs. 1-4).

Freund et al. (5,989,932), Chakrabarti et al. (6,386,533) or Freund et al. (6,131,263) fail to teach the laser diode (bar) having a waveguide therein.

Hu wt al. (6,618,409) teaches passivation of semiconductor laser facets and coating thereof. The laser diodes (bars) comprise facets to be coated having a waveguide therein extending between the facets of the bar (abstract and col. 2, lines 60-67).

Therefor it would have been obvious for one skilled in the art at the time the invention was made to have modified Freund et al. (5,989,932), Chakrabarti et al. (6,386,533) or Freund et al. (6,131,263) process by incorporating a waveguide as evidenced by Hu wt al. (6,618,409) with the expectation of achieving similar success, i.e. coating of the facets.

With respect to the claims 2,4,5,8 and 9 reciting dimensions (width, thickness, length, depth) of the spacer bars, it is the Examiner's position that the dimensions of the spacer bar are "result effective" variables which can be optimized though routine experimentation to obtain the desired end product resulting therefrom.

With respect to claim 3 reciting the spacer bar not exceeding the end of the laser bar, Chakrabarti et al. (6,386,533) depicts this feature in Fig. 6.

With respect to claim 6, the claim recites a material for the spacer. It is the Examiner's position that the claimed spacer material is commonplace in the art and one skilled in the art

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would have had a reasonable expectation of achieving similar success with any of the claimed materials absent a showing of unexpected results.

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canning et al. (4,731,344) or Yuang (2002/0110341) in combination with Hu et al. (6,618,409).

Canning et al. (4,731,344) teaches a method of making a single laser chip having a sawn cavities and secondary cuts. Canning et al. (4,731,344) depicts a laser chip having notches etched therein and then coating the facet areas (abstract and col. 1, line 65 – col. 2, line 55).

Yuang (2002/0110341) teaches manufacturing edge emitting or edge coupled waveguide optoelectronic devices. Yuang (2002/0110341) teaches a laser diode having an etched structure and coating the facets thereof (abstract, Figs. 1A-3C and [0021] – [0034]).

Canning et al. (4,731,344) or Yuang (2002/0110341) fail to teach a waveguide wire in the laser bar/diode)

Features described above concerning a waveguide of the laser bar as evidenced by Hu et al. (6,618,409) are incorporated here.

Therefore one skilled in the art at the time the invention was made would have had a reasonable expectation of achieving similar success with the process of Canning et al. (4,731,344) or Yuang (2002/0110341) on a laser diode/bar having a waveguide wire as evidenced by Hu et al. (6,618,409) because the processes are similar and the end result is a facet coating which is achieved by each reference.


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With respect to the claims 11-13 reciting dimensions (width, thickness, length, depth) of the spacer bars, it is the Examiner's position that the dimensions of the spacer bar are "result effective" variables which can be optimized through routine experimentation to obtain the desired end product resulting therefrom.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brian K Talbot
Primary Examiner
Art Unit 1762

BKT